

Correctional Facilities

Groveland Correctional Facility

Sonyea, NY

Client: NYS Office of General Services

Construction Cost: \$1,057,000 Size: 20,000 sq-ft

Groveland Correctional Facility is a medium security prison that is located in Sonyea, NY. RAN Fire Protection Engineering provided plumbing design services for 3 buildings at the Groveland Correctional Facility. RAN oversaw designing the removal and replacement of the hot and cold-water piping from the mechanical rooms to the bathrooms. A phasing plan was developed for the facility to remain functional while construction was in progress.



Ogdensburg Correctional Facility

Ogdensburg, NY

Client: NYS Office of General Services

Construction Cost: \$400,000 Size: 10,000 sq-ft



Ogdensburg Correctional Facility is a medium security state prison for males. RAN Fire Protection Engineering was the project engineer on the renovation of the Flower Building bathrooms. The building was originally constructed after the conclusion of World War II. RAN engineers facilitated the design for the removal and replacement of wall showers and thermostatic mixing valves. Low voltage shower controls were provided from Correctional Officers desk to wall showers. Floor drains were removed and replaced in shower and toilet areas to comply with current shower drain Department of Health code requirements. Institutional sprinklers were also replaced in the shower rooms. A phasing plan was developed in this fully occupied area.

Attica Correctional Facility

Attica, NY

Client: NYS Office of General Services

Construction Cost: \$350,000 Size: 5,000 sq-ft

Attica Correctional Facility is a maximum-security prison constructed in the 1930's and has held many of the most dangerous criminals of the time.

Attica needed their fire suppression system to be upgraded in the building 15 kitchen. RAN was brought on at 65% completion of the project and there were no delays due to fire protection engineering. RAN Fire Protection Engineering designed a fire suppression system as well as a sprinkler system. A phasing plan needed to be developed for this project to keep the kitchen fully operating throughout construction.



Woodbourne Correctional Facility

Woodbourne, NY

Client: NYS Office of General Services

Construction Cost: \$400,000 Size: 10,000 sq-ft

The Woodbourne Correctional Facility is a medium security prison for males that is operated by the New York State Department of Corrections and Community Supervision. RAN was retained to design a new bathroom building next to the facility's ball field. The new building provided adequate facilities for the population of inmates in the facility. RAN provided plumbing engineering services to this facility.

Correctional Facilities

Brookwood Secure Center

Lansing, NY

Client: NYS Office of General Services

Construction Cost: \$284,000 Size: 42,000 sq-ft



Brookwood Secure Center is a fully secure detention facility for males and females, while under the age of 16. RAN Fire Protection Engineering was retained to evaluate the existing conditions of the fire alarm system and to provide options for combining the multiple systems into one existing system. Due to the nature of the facility no manual fire alarm boxes were installed at the staff offices in the residential wings. New Fire alarm systems were installed in four buildings and all the existing fire alarm systems were networked.



Allen Residential Center

South Kortright, NY

Client: NYS Office of General Services

Construction Cost: \$239,000 Size: 8 Buildings

RAN Fire Protection Engineering designed the replacement of the existing fire detection and alarm system with systems to enhance operational benefits and reduce the risk of loss. New fire alarm control units were installed in each building that are fully addressable and network capable. A master fire alarm control panel was installed

to monitor all fire alarm systems at both Allen Residential and the Youth Leadership Academy. The Project included the design of a campus wide signal conduit system and fiber cable network.

New Jersey Training School

Jamesburg, NJ

The New Jersey Training School is a boy's juvenile detention center that currently holds approximately 200 juveniles. RAN Fire Protection Engineering designed a wet, a dry, and a pre-action sprinkler system to meet the needs of different areas of the building. Fire-rated walls, smoke partitions, and fire stopping details were coordinated with the fire suppression piping drawings. The double interlock pre- action system was designed to serve the boys living facilities, providing a suicide and tamper proof sprinkler system.



Oneida Correctional Facility

Rome, NY

The Oneida Correctional Facility has been around for over 200 years and has undergone many changes throughout the decades. RAN Fire Protection Engineering was retained to identify and correct code deficiencies in Building 9 in the sprinkler system per NFPA 13 code. The sprinklers that were installed needed to match the existing sprinkler response type if installed in an area with existing

coverage. Roughly 33% of the existing light fixtures, public address system, detection, and alarm devices needed to be taken down, stored and reinstalled. It was important that the facility remain functional throughout the construction process.

Correctional Facilities

Bare Hill Correctional Facility

Malone, NY

Domestic hot water lines were deteriorating from the inside out in 7 buildings at the Bare Hill Correctional Facility. RAN Fire Protection Engineering was retained to provide plumbing engineering services on this facility. This involved the removal of DHWC piping and the circulating pump inside of each mechanical room. New DHWC tubing was installed and connected to the existing tubing in the mechanical rooms. A three-speed circulator pump was also installed into each building. Through this project, RAN developed a new plumbing standard for use across the state utilizing CPVC piping.



Taberg Residential Center

Taberg, NY

Client: NYS Office of General Services

Construction Cost: \$188,000 Size: 30,880 sq-ft

The New York State Office of Children and Family Services has multiple residential centers throughout New York State. RAN Fire Protection Engineering was retained to design the fire alarm system at the Taberg Residential Center. The design consisted of implementing a detection, alarm, and fire protection system that interface across 5 buildings of various occupancy types. Additionally, the system was designed to connect with the existing fire alarm system at a nearby sister residential center: Annesville Residential Center.

Taconic Correctional Facility

Bedford Hills, NY

Client: NYS Office of General Services

RAN Fire Protection Engineering provided fire protection services to the Taconic Correctional Facility located in Bedford Hills, NY. RAN provided 100% and final documents for the wiring of the radiant heating mats on this project. The mats were required on 5 out of the 8 entrances for the correctional facility.



YLA, City Challenge

New York, NY

Client: NYS Office of General Services

Construction Cost: \$81,000 Size: 34,000 sq-ft

The scope of service for this project involved the replacement of the existing fire alarm and detection system with a new protected premises system to enhance operational benefits and reduce risk of loss. The new system is a conventional zoned system connected to the existing central station monitoring service. The project scope also included the monitoring of the kitchen hood suppression system.

Correctional Facilities



Elmira Correctional Facility

Elmira, NY

Client: NYS Office of General Services

Cost (phase 1): \$3.5 million Size: 11 Buildings

Construction Cost: \$3.7 million Size: 52,000 sq-ft

Standpipe Design Master Planning

Elmira Correctional Facility is a maximum-security state prison holding approximately 1,800 inmates. RAN Fire Protection Engineering replaced Elmira's existing standpipe system with a new Class III standpipe system in 11 of the facility's buildings.

A standpipe supply loop was installed, which supplied water from a new centrally located electric fire pump. A variance was

obtained to incorporate the unique features of this historic construction and to meet code requirements. RAN was brought on at 65% completion of the project and there were no delays due to fire protection engineering.

C Block Plumbing Upgrade

Elmira Correctional Facility had existing plumbing that dated back to the late 1930s in Building 20. The facility had reported failures with fixtures, plumbing vent piping, soil piping, and cold-water supply to the cells.

RAN engineers designed a new integrated plumbing system that allowed the facility to remain open while construction was in progress, since the facility was fully occupied and had limited swing space. All supply piping, waste piping, and vent piping were removed and replaced. All Soil piping in the facility was replaced with no-hub cast iron. All water closets and lavatories in all the cell areas were removed and replaced with water efficient, stainless-steel fixtures.

Summary of OGS Term:

RAN Fire Protection Engineering was brought on to help the New York State Office of General Services carryout the very specific needs and requirements that come with correctional facilities. These projects specifically, Cayuga CF, Gouverneur CF, Upstate CF, Southport CF, Collins CF, Greene CF, Fishkill CF, Orleans CF, and Bedford Hills CF, were 60% complete when RAN's services were requested. RAN delivered these projects quickly and efficiently, all while ensuring the safety of everyone inside the facilities was not compromised. RAN provided designs for fire suppression, standpipe systems, wet and dry sprinkler systems, and fire alarms. RAN designed fire protection systems with techniques that keep inmates and staff safe and secure. While projects for correctional facilities tend to be similar, RAN updated each facility's drawings and designs based on each specific building. Although being brought on this term at 60% completion, there were no delays nor budget issues for fire protection engineering.